

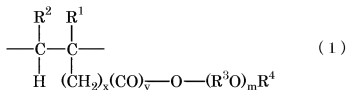
AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions and listings of claims in this application.

Please cancel claims 7, 8, 11 and 12 without prejudice or disclaimer.

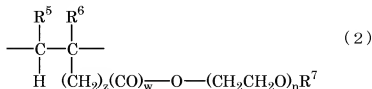
Listing of Claims:

1. (Currently Amended) A cement admixture
which comprises a polycarboxylic acid copolymer having a polyalkylene glycol side chain,
said polycarboxylic acid copolymer being constituted of two or more species of copolymers with different acid values, and
at least one of said two or more species of copolymers with different acid values having an oxyalkylene group containing 3 or more carbon atoms, wherein a content of the polycarboxylic acid copolymer having a polyalkylene glycol side chain containing an oxyalkylene group having 3 or more carbon atoms is 70% by weight or larger, relative to 100% by weight of the total polymer amount contained in the cement admixture.
2. (Previously Presented) The cement admixture according to Claim 1,
wherein the ratio of the acid value of said two or more species of copolymers is 1.2 to 5.
3. (Previously Presented) A cement admixture
which comprises a polycarboxylic acid copolymer having a polyalkylene glycol side chain containing an oxyalkylene group having 3 or more carbon atoms,
said polycarboxylic acid copolymer being constituted of two or more species of copolymers with a weight average molecular weight of 20000 or less.
4. (Previously Presented) The cement admixture according to Claim 1,
wherein said copolymer has a site represented by the following formula (1);



in the formula, R^1 and R^2 may be the same or different and each represents a hydrogen atom or a methyl group; x represents a number of 0 to 2, y represents 0 or 1; R^3Os may be the same or different and each represents an oxyalkylene group having 2 to 18 carbon atoms, and 0.01 to 49 mole % of an average molar number of addition of the oxyalkylene group is an oxyalkylene group having 3 to 18 carbon atoms; R^4 represents a hydrogen atom or a hydrocarbon group having 1 to 30 carbon atoms; and m is an average molar number of addition of the oxyalkylene group, and represents a number of 3 to 300,

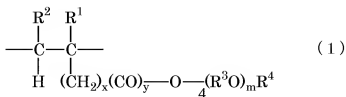
and a site represented by the following formula (2);



in the formula, R^5 and R^6 may be the same or different and each represents a hydrogen atom or a methyl group; z represents a number of 0 to 2; w represents 0 or 1; R^7 represents a hydrogen atom or a hydrocarbon group having 1 to 30 carbon atoms; and n is an average molar number of addition of an oxyethylene group, and represents a number of 1 to 300.

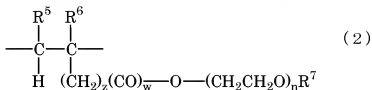
5. (Currently Amended) A cement admixture comprising a polycarboxylic acid copolymer,

wherein said polycarboxylic acid copolymer has the site represented by the following formula (1);

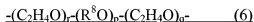


in the formula, R^1 and R^2 may be the same or different and each represents a hydrogen atom or a methyl group; x represents a number of 0 to 2; y represents 0 or 1; R^3 Os may be the same or different and each represents an oxyalkylene group having 2 to 18 carbon atoms, and 0.01 to 49 mole % of an average molar number of addition of the oxyalkylene group is an oxyalkylene group having 3 to 18 carbon atoms; R^4 represents a hydrogen atom or a hydrocarbon group having 1 to 30 carbon atoms; and m is an average molar number of addition of the oxyalkylene group, and represents a number of 3 to 300,

and the site represented by the following formula (2);



in the formula, R^5 and R^6 may be the same or different and each represents a hydrogen atom or a methyl group; z represents a number of 0 to 2; w represents 0 or 1; R^7 represents a hydrogen atom or a hydrocarbon group having 1 to 30 carbon atoms; and n is an average molar number of addition of an oxyethylene group, and represents a number of 1 to 300, wherein (R^3O)_m in the formula (1) is the following formula (6):



in the formula, R^8 represents an alkylene group having 3 to 18 carbon atoms; r and q are average molar numbers of addition of oxyethylene groups, and each represents a number of 1 to 300; p represents an average molar number of addition of the oxyalkylene group, and is a number of 1 to 50, and r+p+q is a number of 3 to 300.

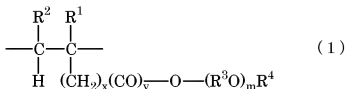
6. (Previously Presented) The cement admixture according to Claim 5,

wherein a mole ratio of the site represented by the formula (1) and the site represented by the formula (2) in said polycarboxylic acid copolymer: (A)/(B) is 1/99 to 99/1.

7. (Canceled)

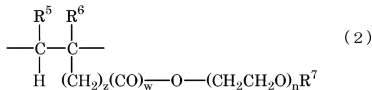
8. (Canceled)

9. (Previously Presented) The cement admixture according to Claim 2, wherein said copolymer has a site represented by the following formula (1);



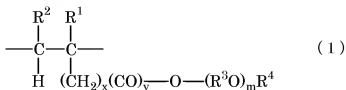
in the formula, R^1 and R^2 may be the same or different and each represents a hydrogen atom or a methyl group; x represents a number of 0 to 2, y represents 0 or 1; R^3O s may be the same or different and each represents an oxyalkylene group having 2 to 18 carbon atoms, and 0.01 to 49 mole % of an average molar number of addition of the oxyalkylene group is an oxyalkylene group having 3 to 18 carbon atoms; R^4 represents a hydrogen atom or a hydrocarbon group having 1 to 30 carbon atoms; and m is an average molar number of addition of the oxyalkylene group, and represents a number of 3 to 300,

and a site represented by the following formula (2);



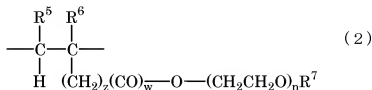
in the formula, R^5 and R^6 may be the same or different and each represents a hydrogen atom or a methyl group; z represents a number of 0 to 2; w represents 0 or 1; R^7 represents a hydrogen atom or a hydrocarbon group having 1 to 30 carbon atoms; and n is an average molar number of addition of an oxyethylene group, and represents a number of 1 to 300.

10. (Previously Presented) The cement admixture according to Claim 3, wherein said copolymer has a site represented by the following formula (1);



in the formula, R¹ and R² may be the same or different and each represents a hydrogen atom or a methyl group; x represents a number of 0 to 2, y represents 0 or 1; R³O's may be the same or different and each represents an oxyalkylene group having 2 to 18 carbon atoms, and 0.01 to 49 mole % of an average molar number of addition of the oxyalkylene group is an oxyalkylene group having 3 to 18 carbon atoms; R⁴ represents a hydrogen atom or a hydrocarbon group having 1 to 30 carbon atoms; and m is an average molar number of addition of the oxyalkylene group, and represents a number of 3 to 300,

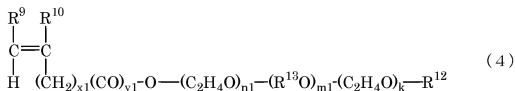
and a site represented by the following formula (2);



in the formula, R⁵ and R⁶ may be the same or different and each represents a hydrogen atom or a methyl group; z represents a number of 0 to 2; w represents 0 or 1; R⁷ represents a hydrogen atom or a hydrocarbon group having 1 to 30 carbon atoms; and n is an average molar number of addition of an oxyethylene group, and represents a number of 1 to 300.

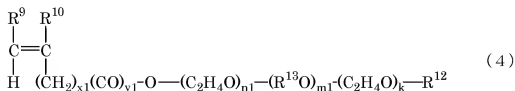
11. (Canceled)
12. (Canceled)
13. (New) The cement admixture according to Claim 1, wherein said polycarboxylic acid copolymer having a polyalkylene glycol side chain containing an

oxyalkylene group having 3 or more carbon atoms is obtained by polymerizing a monomer component containing a polyalkylene glycol unsaturated monomer represented by the following formula (4);



in the formula, R^9 and R^{10} are the same or different, and represent a hydrogen atom or a methyl group, R^{13} s are the same or different, and represent an alkylene group having 3 to 18 carbon atoms, and, $x1$ represents a number of 0 to 2, $y1$ represents 0 or 1, $n1$ and k represent an average molar number of addition of an oxyethylene group, $n1$ is a number of 1 to 200, k is a number of 1 to 200, $m1$ represents an average molar number of addition of an oxyalkylene group, and is a number of 1 to 50, and $n1+m1+k$ is a number of 3 to 200, and R^{12} represents a hydrogen atom or a hydrocarbon group having 1 to 20 carbon atom(s).

14.(New) The cement admixture according to Claim 3, wherein said polycarboxylic acid copolymer having a polyalkylene glycol side chain containing an oxyalkylene group having 3 or more carbon atoms is obtained by polymerizing a monomer component containing a polyalkylene glycol unsaturated monomer represented by the following formula (4);



in the formula, R^9 and R^{10} are the same or different, and represent a hydrogen atom or a methyl group, R^{13} s are the same or different, and represent an alkylene group having 3 to 18 carbon atoms, and, $x1$ represents a number of 0 to 2, $y1$ represents 0 or 1, $n1$ and k represent an

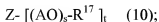
average molar number of addition of an oxyethylene group, n_1 is a number of 1 to 200, k is a number of 1 to 200, m_1 represents an average molar number of addition of an oxyalkylene group, and is a number of 1 to 50, and n_1+m_1+k is a number of 3 to 200, and R^{12} represents a hydrogen atom or a hydrocarbon group having 1 to 20 carbon atom(s).

15. (New) The cement admixture according to claim 3 wherein, a content of the polycarboxylic acid copolymer having a polyalkylene glycol side chain containing an oxyalkylene group having 3 or more carbon atoms is 70% by weight or larger, relative to 100% by weight of the total polymer amount contained in the cement admixture.

16. (New) The cement admixture according to claim 5 wherein, a content of the polycarboxylic acid copolymer having a polyalkylene glycol side chain containing an oxyalkylene group having 3 or more carbon atoms is 70% by weight or larger, relative to 100% by weight of the total polymer amount contained in the cement admixture.

17. (New) The cement admixture according to Claim 1, which contains a polyoxyalkylene compound containing at least one nitrogen atom and, at the same time, having an oxyethylene group and an oxyalkylene group having 3 or more carbon atoms in a molecule, and containing an aliphatic hydrocarbon structure in which 5 or more carbon atoms are bound successively.

18 (New) The cement admixture according to Claim 17 wherein the polyoxyalkylene compound is a compound represented by the formula (10):

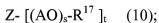


wherein Z represents a compound residue having active hydrogen, R^{17} s are the same or different, and represent a hydrogen atom, a hydrocarbon group, $-Y-NR^{18}R^{19}$, $-\text{COR}^{20}$ or $-\text{CH}_2\text{CH}_2\text{NHCO}-R^{21}$, Y represents an alkylene group having 1 to 10 carbon atom(s), R^{18} and R^{19} are the same or different, and represent a hydrogen atom or a hydrocarbon group having 1 to 30 carbon atom(s), R^{20} and R^{21} represent a hydrocarbon group having 1 to 30 carbon atom(s), or a group having at least one carboxyl group or sulfonyl group or a salt thereof, AO s are the same or different, and represent an oxyalkylene group having 2 to 18 carbon atoms, "s"s are the same or different, and

represent an average molar number of addition of an oxyalkylene group, and is 1 to 300, t is 1 to 300 and, regarding the total molar number of addition of the oxyethylene group in the oxyalkylene group as u and a total molar number of addition of an oxyalkylene group having 3 or more carbon atoms to be v, a relationship of $0.1 < u/(u+v) < 0.9$, $1 < u+v < 300$ is satisfied.

19. (New) The cement admixture according to Claim 3, which contains a polyoxyalkylene compound containing at least one nitrogen atom and, at the same time, having an oxyethylene group and an oxyalkylene group having 3 or more carbon atoms in a molecule, and containing an aliphatic hydrocarbon structure in which 5 or more carbon atoms are bound successively.

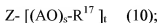
20 (New) The cement admixture according to Claim 19 wherein the polyoxyalkylene compound is a compound represented by the formula (10):



wherein Z represents a compound residue having active hydrogen, R^{17} s are the same or different, and represent a hydrogen atom, a hydrocarbon group, $-Y-NR^{18}R^{19}$, $-COR^{20}$ or $-CH_2CH_2NHCO-R^{21}$, Y represents an alkylene group having 1 to 10 carbon atom(s), R^{18} and R^{19} are the same or different, and represent a hydrogen atom or a hydrocarbon group having 1 to 30 carbon atom(s), R^{20} and R^{21} represent a hydrocarbon group having 1 to 30 carbon atom(s), or a group having at least one carboxyl group or sulfonyl group or a salt thereof, AOs are the same or different, and represent an oxyalkylene group having 2 to 18 carbon atoms, "s"s are the same or different, and represent an average molar number of addition of an oxyalkylene group, and is 1 to 300, t is 1 to 300 and, regarding the total molar number of addition of the oxyethylene group in the oxyalkylene group as u and a total molar number of addition of an oxyalkylene group having 3 or more carbon atoms to be v, a relationship of $0.1 < u/(u+v) < 0.9$, $1 < u+v < 300$ is satisfied.

21. (New) The cement admixture according to Claim 5, which contains a polyoxyalkylene compound containing at least one nitrogen atom and, at the same time, having an oxyethylene group and an oxyalkylene group having 3 or more carbon atoms in a molecule, and containing an aliphatic hydrocarbon structure in which 5 or more carbon atoms are bound successively.

22 (New) The cement admixture according to Claim 21 wherein the polyoxyalkylene compound is a compound represented by the formula (10):



wherein Z represents a compound residue having active hydrogen, R^{17} s are the same or different, and represent a hydrogen atom, a hydrocarbon group, $-Y-NR^{18}R^{19}$, $-\text{COR}^{20}$ or $-\text{CH}_2\text{CH}_2\text{NHCO}-R^{21}$, Y represents an alkylene group having 1 to 10 carbon atom(s), R^{18} and R^{19} are the same or different, and represent a hydrogen atom or a hydrocarbon group having 1 to 30 carbon atom(s), R^{20} and R^{21} represent a hydrocarbon group having 1 to 30 carbon atom(s), or a group having at least one carboxyl group or sulfonyl group or a salt thereof, AOs are the same or different, and represent an oxyalkylene group having 2 to 18 carbon atoms, "s"s are the same or different, and represent an average molar number of addition of an oxyalkylene group, and is 1 to 300, t is 1 to 300 and, regarding the total molar number of addition of the oxyethylene group in the oxyalkylene group as u and a total molar number of addition of an oxyalkylene group having 3 or more carbon atoms to be v, a relationship of $0.1 < u/(u+v) < 0.9$, $1 < u+v < 300$ is satisfied.